



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/453,586	12/03/1999	YASUHIKO TAKEMURA	0756-2061	2842

7590

04/08/2002

SIXBEY FRIEDMAN LEEDOM & FERGUSON
ERIC J ROBINSON
8180 GREENSBORO DRIVE
SUITE 600
MCLEAN, VA 22102

EXAMINER

NGUYEN, JIMMY H

ART UNIT	PAPER NUMBER
----------	--------------

2673

12

DATE MAILED: 04/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/453,586

Applicant(s)

TAKEMURA, YASUHIKO

Examiner

Jimmy H. Nguyen

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/419,956.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 7, 8, 10, 11 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 52 and 55-66 are objected to because of the following informalities: line 1, "active matrix" should be changed to -- semiconductor -- to be consistent with independent claims.

Appropriate correction are required.

Information Disclosure Statement

2. It is noted that the reference JP-03-077922 listed in IDS filed on 11/01/2000 and entered as Paper No. 8 is also listed in IDS filed on 12/03/99 and entered as paper No. 2. Therefore, Examiner crossed out the reference in IDS Paper No. 8.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-68 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,023,308 in view of Hamada et al. (USPN: 5,194,974, cited in IDS entered as paper No. 2).

As per claims above, although the conflicting claims are not identical, they are not patentably distinct from each other because the patent and the application are claiming common subject matter, as follows:

<u>Pending Application</u>	<u>Patent</u>
A LCD semiconductor device	An active matrix LCD device
A substrate	A substrate
First and second top-gate or bottom-gate TFTs	First and second top-gate or bottom-gate TFTs
First and second signal lines	First and second signal lines
A voltage supply line	A voltage supply line
A pixel electrode	A pixel electrode
A driving circuit	A driving circuit

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent except for an operation method comprising a step of applying a voltage from the voltage supply line to the pixel electrode for a period during one frame wherein the period is determined in accordance with a desired tone of a display, as recited in independent claims 1-24, and a step of applying one or more pulses from the voltage supply line to the pixel electrode during one frame wherein a number of pulses applied to the pixel electrode during one frame is determined in accordance with a desired tone of a display, as recited in independent claims 25-48. However, Hamada et al. disclose a related apparatus and an associate method, wherein as noting in figure 4 and at column 7, lines 37-46 and column 8, lines 21-23, the common line (F) (corresponding to the claimed voltage supply line) is supplied by an a.c. voltage

Art Unit: 2673

(Vc') having a rectangular waveform of $\pm 7.5V$, and a static voltage is supplied to pixel electrode for a desired period. Accordingly, one skilled in the art would recognize that Hamada et al. disclose the step of applying a voltage from the voltage supply line to the pixel electrode for a period during one frame wherein the period is determined in accordance with a desired tone of a display, and the step of applying one or more pulses from the voltage supply line to the pixel electrode during one frame wherein a number of pulses applied to the pixel electrode during one frame is determined in accordance with a desired tone of a display. Therefore, it would have been obvious to one skilled in the art to combine Hamada et al. with the patent to obtain the claimed invention as specified in claims above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamazaki et al. (USPN: 5,289,030, see fig. 4 and col. 11, line 48, col. 16, line 14) and Yamazaki et al. (USPN: 5,308,998, fig. 7C, co. 8, lines 18-48), both disclose a related device.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2673

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

JHN
April 4, 2002



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600